Beginner's Corner Perfin Producing Machines

Paul Mistretta (LM#111)

This month's column will be short (except for the four pages of illustrations from long ago.) My current expertise resides in collecting stamps with holes already in them, rather than in punching those holes in the first place. However, over the years there have been several excellent articles published in the *Bulletin* which on which I will rely heavily (and will cite at the end of this article, for further study if this subject interests you).

The process of punching stamps is easily told; a pin is pushed through a piece of paper while being forced into a hole in a 'die'. This pin (or these pins) is (are) set such that they can repeatedly be pushed into the same hole(s).

The first reference to perforating machines in the *Bulletin* is a brief paragraph in the July 1952 issue (first [unnumbered] page.) The note, in its entirety, reads:

PERFORATING MACHINES: The Cummings Perforator Company builds most of the perforators used in the U. S. There are two important types: a. The kind with five sets of pins and holes which is capable of punching through four layers at one stroke or 20 stamps. B. The second kind has 10 sets of pins and holes and is capable of handling up to 40 stamps a stroke. Approximately 400 and 800 stamps can be perforated per minute by the two machines respectively. At the operator's discretion, perfin designs may be placed in almost any position and "mirror images" may be created by folding the stamps or sheets properly.

There is a problem with the information given here which has been rectified over time – the correct spelling of the company name is actually "Cummins," more precisely the B. F. Cummins Co., Chicago,, Illinois. In addition to Cummins, American Perforators was also competitive in the general market, as were, in a more specialized market, Mail-o-Meter and subsequently Schermack.

(For those unfamiliar with the last two types, imperforate coil stamps were prepared with the specialized, between-stamp [Mail-o-Meter (large holes) or Schermack (large rectangles)] perforations and shipped to the users. Stamps were then perfinned, separated, and affixed to envelopes in a continuous operation by a single machine.) And finally, some machines were purchased overseas, most from Sloper or Bradley Brothers in England.

The next reference to perforators in the *Bulletin*, more than a year later (December 1953), describes a perforator with "a heavy base with a broad apron for feeding the sheets of stamps into the throat where the stamps are perforated." It goes on to describe the perforating of stamps as follows:

The smaller machines, taking half a sheet wide have an overhanging arbor secured to the base at one side of the throat while the large machines that take the full width of the sheet have the arbor supported by columns at both sides. A handle is pivoted in the arbor so that pulling it down pushes the pins downward through the stamps to the die openings in the bed.

In addition to five and ten die machines, single die machines were fairly common – with many of the latter in private hands.

Most of the perforators appear to have been manually fed, that is, the sheets of stamps being perforated were fed through the machine as ir was operated by hand. These sheets are easily identified since, while the patterns across the rows are punched at consistent intervals, the rows are not necessarily a consistent distance from each other (Cummins machine models No. 52 & No. 53). The Cummins No. 56 machine was motor driven and rows were consistently spaced from each other. Not shown here is the single die Cummins No. 50; this model (according to Dave Stumpf *TPB* October 1973) was discontinued in about 1930. He also mentions a reported but unseen ("...no illustration has ever been found...") Cummins No. 51, 2-die perforator.

Plating positions of individual perfins from several of the multi-head perforators is possible. Minor identifiable differences between the individual dies often resulted from the hand reproduction of the patterns .

In the U. S. the size of pins in a pattern is limited to a diameter of 1/32". Due to the fact that at 1/32" diameter pin is already very small and, even in hardened steel at that diameter is somewhat fragile, 1/32" or very close to it became the most common pin size. There are a few major exceptions to this generalization; several, but not all, are patterns which could not have been created with the 1/32" pins (see D41.7 [B rated], N54.5 [A], O1.1 [A rated], P184.2 [A], T81F [B], T109.5 [B+], Z1A [D], Des 57P, & Des 60P.) Note all (ex. The Z pattern) have relatively high value – probably due to a short use-life of the perforator head.

For one of these I am certain that the pin life was not as expected. In the July-August 1986 *Perfins Bulletin* the pattern now listed as Des 60P, the personal pattern designed and built by Michael Collins of Yakima, Wash was announced. First day of use for this pattern, established by a cover mailed to Harry Rickard and reprinted in the *Bulletin* note, is May 12, 1986. By the time the information for publication arrived (probably early May) the fine pins used to produce the pattern had begun to break. The pattern illustrated in *TPB* is already missing at least 7 of pins. And this pattern replaced Michael's first attempt (D57P) for which a even complete illustration is unavailable (see the US catalog).

In his April 1975 article on perfin machines, Dave Stumpf described the preparation of a perforator's die head. Basically, two strips of metal are laid on top of each other. A pattern template is laid on the upper surface of one of the bars and starter holes are drilled. This process is repeated as often as there will be dies in the final perforator head. Once the [1, 2, 3, 5, 10 or 100] patterns are laid out on the surface of th upper bar or plate, holes are drilled completely through the it (now the female bar or the base plate) continuing part way through the second bar or plate (now noted as male or arbor unit). The plates, now holey, are now separated. Pins are driven into the holes in the male plate protruding about ½" from its surface. This unit is now welded to the upper (moving) part of the perforator – the arbor

mentioned above. The female plate is now placed on the pins to establish the final relation between male and female bars or plates. The operating lever is pushed down and the base plate is then welded place. The lever is then released, the machine is allowed to cool off. And then, let the perfinning begin!

I have found (*Bulletin* – May 1970) four pages of interest that are reproduced since the pictures are much clearer than the words used above when talking about the arbor, base plate, etc. in these machines. (In this case, a picture really is worth a thousand words. The reproduced pages are advertising sheets for the Cummins No. 52 Postage Stamp Perforator (lever [manually] operated 5 die perforator), the Cummins No. 53 Postage Stamp Perforator (lever [manually] operated 10 die head), the Cummins No. 56 Postage Stamp Perforator (motor operated 10 die perforator), and a copy of a Cummins' 'Bureau of Identification' certificate.

Just to keep things interesting, Doug Cutler adds another manufacturer to the mix in a March 1991 article. In this note he describes the product of the Chicago Check Perforator Company. More fun!

References:

Anon. 1969. Perfin machines and their products. *TPB* 1969(Mar.):

Cummins Manufacturing Company. 1970. [Illustrated pages showing 3 Cummins machines and a Cummins' registration certificate.] *TPB* 1970(May). 4 pgs.

Cutler, D. 1990. Chicago Check Perforator. *TPB* 1991 (#437): 66-68.

[Misegades, K.] 1952. Perforating machines. *TPB* 1952 (July):

[Misegades, K.] 1953. Perforating machines and their product. *TPB* 1953 (Dec.): 2-3.

Rickard, H. 1984. How to distinguish Cummins from American Perforator perfins. *TPB* 1984 (#366): 23.

[Stump, D.] 1973. Perfin machinery. *TPB* 1973 (#273): 1, 5, & 6.

Cummins No. 52 Postage Stamp Perforator

SAFEGUARDS THE POSTAGE STAMP ACCOUNT



Capacity Per Stroke

- 3 or less initials on each stamp, (20) stamps each stroke. Row of 5. (our sheets thick.)
- 4 initials on each stamp, (15 stamps each stroke, Row of 5, three sheets thick.)
- 5 initials on each stamp, (10 stamps each stroke. Row of 5, two sheets thick.)
- 6 initials on each stamp, 110 stamps each stroke. Row of 5, two shorts thick.)

SPECIFICATIONS

| Maximum height |
|---|
| Maximum width incl. table 8" |
| Length of base |
| |
| Length of handle from |
| center of pivot101/4" |
| Size of table |
| Net weight |
| Shipping weight30 lbs. |
| Size of shipping box71/4x91/4x181/2" Finished in Black Enamel and Nickel. |

The Perforations made by this machine conform to the requirements of the Post Office Department, i. e., Holes not over 1-32 inch in diameter. Total space not over 1/2 in. square.

The stamps are perforated in half sheets lengthwise. They lie flat on a plate flush with the die and are pushed forward by the operator one row at a time. A marginal guide properly locates the perforation on each stamp. The handle is raised by a spring and its stroke is short and quick—suitable for rapid work.



CUMMINS PERFORATOR CO.

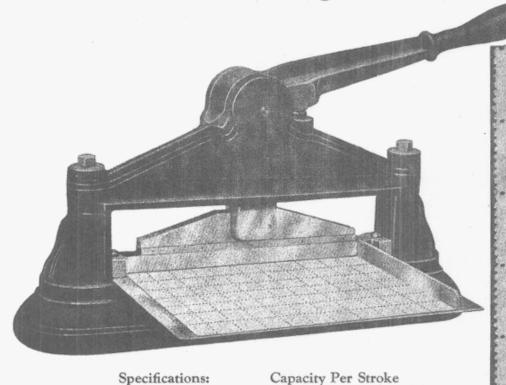
4740 RAVENSWOOD AVENUE

CHICAGO, ILLINOIS

Form 60

OVER

Cummins No. 53 Postage Stamp Perforator



Specifications:

Weight, net33 lbs. " boxed . . . 48 lbs.

Base..... 5 x 171/4 in.

Height.....9 in.

Length of handle 141/2in.

from Center of Pivot

Finished in Black Enamel and Nickel

(40 stamps each stroke. Row of 10, four sheets thick) 4 initials on each stamp,

(30 stamps each stroke. Row of 10, three sheets thick.)

3 or less initials on each stamp,

5 initials on each stamp, (20 stamps each stroke. Row of 10, two sheets thick.)

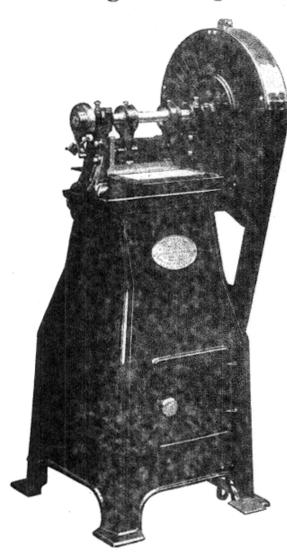
6 initials on each stamp, (20 stamps each stroke. Row of 10, two sheets thick.)

The Perforations made by this machine conform to the requirements of the Post Office Department, i. e., Holes not over 1-32 inch in diameter. Total space not over 1/2 in. square.

CUMMINS PERFORATOR CO.

4740 Ravenswood Avenue CHICAGO, ILL.

Cummins No. 56 Postage Stamp Perforator (Motor Operated)



SPECIFICATIONS

Weight net 500 lbs., boxed 645 lbs. Base 21" x 21".

Height to top of feed table 37".

Height to top of fly wheel guard 54".

The Perforations made by this machine conform to the requirements of the Post Office Department, i. e., Holes not over 1-32 inch in diameter. Total space not over $\frac{1}{2}$ in. square.

Perforating has been found to be the only effective method of preventing the stealing of stamps.

Other methods of marking for identification by owner are forbidden as amounting to cancellation.

The stamps are perforated without being separated from the sheet. They lie flat on a plate flush with the die and are pushed forward by the operator one row at a time. An adjustable marginal guide properly locates the perforation on each stamp.

CAPACITY PER STROKE

3 or less initials on each stamp, (30 stamps each stroke. Row of 10, three sheets thick.)

4 initials on each stamp, (30 stamps each stroke. Row of 10, three sheets thick.)

5 initials on each stamp, (20 stamps each stroke. Row of 10, two sheets thick.)

6 initials on each stamp, (20 stamps each stroke. Row of 10, two sheets thick.)

CUMMINS PERFORATOR CO.

4740 Ravenswood Avenue

Chicago, Illinois

Postage Stamps

192_

On and after this date, the POSTAGE STAMPS of

will be protected by perforating the initials as per sample affixed.

This is in accordance with the ruling of the

0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0



Postmaster General of the United States.

The above design is registered in our

Bureau of Identification

in pursuance of which we agree to furnish whenever required, either by the owner or by any officer or representative of the Post Office Department of the United States, reliable evidence of IDENTITY AND OWNERSHIP of this design. (We do not duplicate designs.)

Perforated Stamps are not accepted in payment by reputable concerns, but if sent by any one, may be forwarded to us. We will take them up and forward to owner with full particulars—name of sender, circumstances, etc.

Perforated Stamps must not be sold or given to an official, employee, friend or customer and must never be used for remittances.

Employees desiring to purchase stamps apply to Cashier, who has unperforated stamps for sale for accommodation of officials and employees.

No excuse will be entertained for any employee using or having any of these stamps in his possession.

Cummins Perforator Company

Formerly THE B. F. CUMMINS COMPANY
Rabenswood Station
Chicago